

ORDER FOR SUPPLIES OR SERVICES							PAGE OF PAGES		
							1	14	
<b>IMPORTANT:</b> Mark all packages and papers with contract and/or order numbers.									
1. DATE OF ORDER 08/12/2021		2. CONTRACT NO. (If any) 68HERC20D0016			6. SHIP TO:				
3. ORDER NO. 68HERC21F0351		4. REQUISITION/REFERENCE NO. See Schedule		a. NAME OF CONSIGNEE  Region 8					
5. ISSUING OFFICE (Address correspondence to) CAD  US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 1595 Wynkoop St					
				c. CITY Denver		d. STATE CO	e. ZIP CODE 80202-1129		
7. TO: Andrew Parker				f. SHIP VIA					
a. NAME OF CONTRACTOR TETRA TECH, INC.				8. TYPE OF ORDER					
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE REFERENCE YOUR:			<input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.		
c. STREET ADDRESS 10306 EATON PL STE 340				Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.					
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220302201						
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OW					
11. BUSINESS CLASSIFICATION (Check appropriate box(es))							12. F.O.B. POINT		
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone  <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB									
13. PLACE OF			14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 08/11/2022		16. DISCOUNT TERMS		
a. INSPECTION Destination		b. ACCEPTANCE Destination							
17. SCHEDULE (See reverse for Rejections)									
ITEM NO. (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)	
	DUNS Number: 198549560 TOCOR: Tina Laidlaw Invoice Approver: TINA LAIDLAW Alt Invoice App: PETER BRUMM  Continued ...								
SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		\$0.00		
	21. MAIL INVOICE TO:								
	a. NAME		RTP Finance Center				\$277,852.88		
	b. STREET ADDRESS (or P.O. Box)		US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						
c. CITY		d. STATE	e. ZIP CODE						
Durham		NC	27711						
22. UNITED STATES OF AMERICA BY (Signature)					08/12/2021		23. NAME (Typed) Keith Pfeffer TITLE: CONTRACTING/ORDERING OFFICER		

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER		CONTRACT NO.		ORDER NO.		
08/12/2021		68HERC20D0016		68HERC21F0351		
ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 08/12/2021 to 08/11/2022  Base Period: Assessment Methodology work for Wyoming and Montana, Tongue River SWAT Modeling and WY TMDL completion Requisition No: PR-R8-21-00467, PR-R8-21-00484  Accounting Info: 21-22-B-87FT-000BD4-2505-2187TE4005-00 1 BFY: 21 EFY: 22 Fund: B Budget Org: 87FT Program (PRC): 000BD4 Budget (BOC): 2505 DCN - Line ID: 2187TE4005-001 Funding Flag: Partial Funded: \$225,000.00 Accounting Info: 21-22-B-08W-000YF2-2532-2108WSW805-001 BFY: 21 EFY: 22 Fund: B Budget Org: 08W Program (PRC): 000YF2 Budget (BOC): 2532 DCN - Line ID: 2108WSW805-001 Funding Flag: Partial Funded: \$6,845.37 Accounting Info: 20-21-B-08WCO21-000YF2-2532-2108WSW805-002 BFY: 20 EFY: 21 Fund: B Budget Org: 08WCO21 Program (PRC): 000YF2 Budget (BOC): 2532 DCN - Line ID: 2108WSW805-002 Funding Flag: Partial Funded: \$17,093.74 Accounting Info: 20-21-B-08WCO21-000YF8-2532-2108WSW805-003 BFY: 20 EFY: 21 Fund: B Budget Org: 08WCO21 Program (PRC): 000YF8 Budget (BOC): 2532 DCN - Line ID: 2108WSW805-003 Funding Flag: Partial Continued ...					



ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION

PAGE NO  
3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER  
08/12/2021

CONTRACT NO.  
68HERC20D0016

ORDER NO.  
68HERC21F0351

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Funded: \$26,060.89					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$275,000.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC20D0016**  
**TASK ORDER NO. 68HERC21F0351**

**BASE Period of Performance - FROM 08/12/2021 through 08/11/2022**

<b><u>FUNDING ACTION</u></b>	<b><u>FUNDING</u></b>	
<b>Total BASE Period Amount:</b>	\$	277,852.88
Initial Incremental Funding:	\$	275,000.00
Balance Unfunded	\$	2,852.88

**SECTION F - Deliveries or Performance**

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance for line item 0001 (Base Period) of this Task Order shall be from 08/12/2021 through 08/11/2022, inclusive of all required reports.

**SECTION G - Contract Administration Data**

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Tina Laidlaw, 406-457-5016, laidlaw.tina@epa.gov	(TOCOR)
Peter Brumm, 406-457-5029, brumm.peter@epa.gov	(Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov	(Contracting Officer)
Kim Loesch, 513-487-2058, loesch.kimberly@epa.gov	(Contracting Officer)
Ernie Forrest, 513-569-7414, forrest.earnest@epa.gov	(Contract Specialist)

## **Performance Work Statement**

Contract: 68HERC20D0016

Task Order #: 68HERC21F0351

Contractor: Tetra Tech, Inc.

Task Order Title: Assessment Methodology work for Wyoming and Montana, Tongue River SWAT Modeling and WY TMDL completion

EPA Contract Level COR: Tanyan Bailey (202-564-3133)  
Bailey.Tanyan@epa.gov

EPA Task Order COR: Tina Laidlaw  
Laidlaw.tina@epa.gov

EPA Alternate Task Order COR: Peter Brumm  
brumm.peter@epa.gov

Period of Performance: Base Period: TO Award through 12 Months  
Option Period 1: 12 Months following Base Period

### **A. PROBLEM STATEMENT AND TASK ORDER (TO) DESCRIPTION**

The purpose of this Task Order is to provide support to the states of Wyoming and Montana and to assist those states with developing assessment methods and analyzing existing and readily available data to develop their state Integrated Reports. Specific tasks include: 1) development of draft parameter-specific assessment methods for Wyoming and Montana based on state specific needs and approaches; 2) improving data downloads and automating data analyses; and 3) completing waterbody-specific analyses for Wyoming and Montana.

### **B. TASKS**

The following tasks have been identified to support the above goals. It is expected that the contractor will work closely with the EPA TOCOR and to complete these tasks.

#### **Task 1 – Quality Assurance (Base Year Only)**

All tasks where the Scope of Work includes collection of or use of environmental data, design or construction of technologies, develops or uses models, or may require quality assurance or control will require a Quality Assurance Project Plan (QAPP). Following the notice to proceed, the Contractor shall

prepare a project-specific QAPP following G5 and R5 (<http://www.epa.gov/quality/qs-docs/g5-final.pdf>, <http://www.epa.gov/region8/qa/QAEPAr5-final.pdf>).

The Contractor shall submit the completed Region 8 QA Crosswalk with the QAPP. The form may be found at EPA Region 8's QA website: <http://www.epa.gov/region8/qa/reference.html>.

The QAPP must be approved prior to the initiation of work under this Task Order. The Contractor shall review and update the QAPP as needed to follow project objectives and/or as required by changes in the Task Order SOW using the Region 8 QA Crosswalk.

Deliverables: A single QAPP addressing the proposed activities.

## Task 2 – Scoping Conference Call

The Contractor shall schedule a scoping meeting with the EPA Task Order COR within 15 business days of approval of the project QAPP following receipt of this PWS to discuss the overall objective of the PWS and specific task elements.

Deliverables: Meeting minutes from the scoping conference call.

## Task 3 – Progress Reports

The contractor shall prepare Monthly Progress Reports containing a description of the work performed that month, specific difficulties encountered, hours expended and percentage of each task completed with accompanying invoices based on work performed; electronic copies, with bookmarks, to the COR and CO.

Deliverables: Monthly progress reports for the life of the project.

## Task 4 – Support for Development of Assessment Methods for Montana and Wyoming

EPA Region 8 staff recognize that Montana Department of Environmental Quality's (MDEQ) and Wyoming Department of Environmental Quality (WYDEQ)'s monitoring and assessment programs lack the resources to assemble or evaluate all existing and readily available data and information as required by EPA's regulation. Additionally, both states cite a lack of assessment methods as a basis for not assessing waters as part of the development of their Integrated Reports. This performance work statement is designed to help both states develop and finalize assessment methods for any parameters for which methods are missing; review and analyze existing and readily available data; and complete assessments for complex waterbodies.

The project will be implemented in close coordination with WDEQ and MDEQ. If efficient, the Contractor will have calls to discuss overlapping work with both states or individual calls with Wyoming or Montana to review and discuss draft deliverables.

### **Task 4A – Develop Draft Parameter-Specific Assessment Methods for Wyoming and Montana Based on State Specific Needs and Approaches (Base Year Only)**

First, the Contractor will become familiar with the previous work and reports generated as part of the previous work assignment on Montana and Wyoming's assessment methods, or the state's work that

has been completed, to efficiently build draft methods upon if available. EPA Region 8, or the state, will provide those documents to the Contractor. Specifically, the Contractor will review the summary documentation for the following parameters: dissolved oxygen (grab and continuous data for streams), pH (grab and continuous data), eutrophication/ nutrients/ chlorophyll-a methods for lakes/reservoirs, Montana's fish tissue assessment, draft Lake Koocanusa/Kootenai River selenium assessment methods and state lake assessment method summary document. Additionally, the Contractor will review existing assessment methods developed by Wyoming and Montana DEQ as examples of the level of documentation and approach the states are using for assessments. For Wyoming, the Contractor will also review the TetraTech report on the Wyoming Data Compilation and Analysis tool that was developed through a previous contract. The Contractor will review these documents to understand the details covered in state assessment methods and to identify an assessment method framework that will be applied for each parameter.

The Contractor will build from the assessment methodology table template developed as part of the previous work assignment on Montana and Wyoming's assessment methods. The existing table will be evaluated and revised to ensure that that critical assessment method details are addressed. This table format will be used to summarize state assessment methods not previously evaluated as part of the previous work assignment. A draft version of the table will be shared with both states and modified based on their review and input. Using the final table template, the Contractor will coordinate with states and EPA to draft assessment methods for the following parameters and/or waterbodies for each state. In addition, the table should include information on the following details:

- water body type and designated use being assessed;
- indicators and thresholds (i.e., applicable criteria and/or identification of specific indicators and associated thresholds or an outline of a process for deriving numeric thresholds for non-numeric criteria);
- minimum dataset requirements for listing and delisting decisions;
- recommended data or monitoring requirements for future projects that would use the method;
- representativeness considerations;
- spatial and temporal independence considerations;
- how grab vs. continuous data (or large datasets) will be used;
- data synthesis/prep approach; and
- data analysis component.

**Wyoming:** The Contractor will work with WYDEQ to 1) brainstorm broader use-specific assessment methods (e.g., that identify the suite of parameters that should be assessed for a complete designated use assessment); and 2) additionally, the contractor will develop draft detailed parameter-specific assessment tables for the following parameters. The draft parameter-specific tables will be reviewed and discussed with Wyoming and finalized to incorporate input from the state. The state will then use this information to develop their parameter-specific assessment document.

- Priority and non-priority pollutants (e.g., Metals)
  - Aquatic life criteria
  - Human health criteria

- Drinking water criteria
- Cyanotoxins
- Dissolved oxygen (DO)
- pH
- Temperature (this effort will build from previous work completed by a University of Wyoming graduate student)
- Sediment (this effort will build from previous work completed by WYDEQ)
- Nutrient assessment methods for streams (this effort will build from the Fish Creek assessment work)
- Nutrient assessment methods for lakes (this effort will build from the lake nutrient threshold work)

**Montana:** The Contractor will develop draft detailed parameter-specific assessment tables for the following parameters. The draft parameter-specific tables will be reviewed and discussed with Wyoming and finalized to incorporate input from the state. The state will then use this information to develop their parameter-specific assessment document. If the state has already begun development of an assessment method for a parameter listed below, the Contractor will provide technical assistance as needed to assist the state in completing their assessment process. For example, MDEQ is currently working on developing a lake assessment approach. The Contractor's technical support may focus on assisting MDEQ with identifying applicable thresholds that could be used to evaluate eutrophication impacts.

- Ammonia
- Turbidity and TSS
- Fish Tissue – Human health and fish health
- Toxics/carcinogens (expand/modify on metals that we currently have)
- Lake assessment approach
- Large river assessment method

**Deliverables:** The Contractor will provide a) a draft table template outlining the assessment approach for each specific parameter; and b) a final table detailing the parameter-specific information that the state can then use to write an assessment method. Depending on the parameter and the work completed by the state by the start of the contract, the Contractor may identify specific thresholds for lakes, large rivers and TSS/turbidity. The contractor will write a draft ammonia assessment method document and may need to develop draft documents for other parameters for Montana DEQ, if needed.

**Task 4B – Assistance with Improving Data Downloads and Automating Data Analyses (OPTIONAL for Base Period; to be covered in Option Period 1 pending additional funds)**

If time and budget allow, the Task Order COR will direct the Contractor to complete the following optional task. The objective of this task is to provide tools to assist Montana and Wyoming with automating/streamlining their data analysis process. The Contractor will review the Wyoming Data Compilation and Analysis tool and evaluate any necessary modifications based on the assessment methods developed as part of Task 4A and based on input from the state. The user guide for the data analysis tool will be revised to reflect any revisions to the data analysis tool and to provide clear instructions on how the tool should be used. The Wyoming Data Compilation and Analysis Tool will

provide the starting point for developing a similar tool for Montana with modifications to reflect Montana's input and state-specific process. Additionally, Region 8 will set up a conference with EPA HQs, WYDEQ, MDEQ, and the Contractor to discuss automated data tools that EPA may be developing that pull data from the WQ Portal.

The Contractor will evaluate whether this tool can be modified to rely on data downloaded from the WQ Portal and tailored to reflect each state's process for downloading data and analytical methods.

Deliverables: 1) The Contractor will provide a revised data compilation and analysis tool that addresses all the parameters for which the Contractor is developing assessment methods for Wyoming along with updated users guide. 2) For Montana, the Contractor will provide a data automation tool that exports data from the Portal and compiles and analyzes data in alignment with Montana's specific processes.

**Task 4C – Assist with Waterbody-specific Analyses for Wyoming and Montana (OPTIONAL for Base Period; to be covered in Option Period 1 pending additional funds)**

If time and budget allow, the Task Order COR will direct the Contractor to complete the following optional task. After completion of Tasks 4A and 4B the Contractor shall assist MDEQ and WYDEQ with compiling and analyzing all existing and readily available data for specific waterbodies of interest.

The Contractor will compile the available chemical, physical, and biological data for the projects listed below to facilitate efficient, future data analysis. Data will be summarized consistent with the automated data tools developed in Task 4B and in alignment with state processes. The Contractor will first evaluate whether, following the applicable assessment methods, there is sufficient information to complete an assessment and will complete a QA/QC review of the available data. Data will be compared to the applicable thresholds/numeric criteria. The Contractor will provide a summary that includes maps; exceedance report; and graphs.

**Wyoming:** The Contractor will compile, create a QA review, and analyze data for the following waterbodies or datasets:

- USGS collected throughout Wyoming for the past five years (specific timeline to be determined with WYDEQ)
- Lakes/reservoirs

**Montana:** The Contractor will compile, create a QA review and analyze data for the following waterbodies or datasets:

- Lake Mary Ronan and Clark Canyon Reservoir and potentially other lakes and reservoirs
- Tongue/Powder/Rosebud tributaries
- Kootenai
- Mainstem Gallatin River
- Nutrients, in general (if needed)

Deliverables: For each waterbody, data outputs will include a map of the sampling locations and sampling data; QA review about which data can be used for assessment purposes according to methods, graphs, exceedance reports according to assessment methods, and a synthesis of results.



## Task 5 – Tongue River SWATsalt Model Scenarios and Documentation

The Tongue River Watershed encompasses approximately 5,400 square miles draining a landmass from the Big Horn Mountains of northcentral WY to the confluence with the Yellowstone River in southeastern MT. Major land uses consist of grassland, rangeland, agriculture, and resource extraction. Agricultural practices rely on irrigation, supported by a storage (Tongue River Reservoir) and canal system, due to the semi-arid climate.

EPA, with the support of Tetra Tech, developed a LSPC and CE-QUAL-W2 watershed model in the mid-2000s to study the watershed when rapid coal bed methane (CBM) development was taking place. Using some of this information, MDEQ first identified the lower Tongue River as impaired in 2008 noting that salinity is preventing agricultural uses from being fully supported:

[http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/Reports/IRs/2018/Appendix\\_B.pdf](http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/Reports/IRs/2018/Appendix_B.pdf).

In 2016, MDEQ initiated the TMDL process by developing a different model, SWATsalt, known to excel at simulating land management activities and agricultural impacts. SWATsalt is based on the SWAT model and was developed for MDEQ under contract by the developers of SWAT. SWATsalt adds the ability to simulate up to 10 salt cations in the SWAT program. The watershed below the reservoir was selected as the modeling focus area and MDEQ treated the upstream contributions from the reservoir and three tributary basins as point source input files into the model. The model run period was from 2000 to 2013, but the model was analyzed from 2005 to 2013, allowing the first few years of the run period to be used as an initial warm-up. In 2019, work had halted due to MDEQ staffing loss.

In 2020 and 2021, Tetra Tech evaluated the incomplete SWATsalt model, modified various inputs, produced a calibrated model and ran a limited number of scenarios. The goal for this task is to perform additional model scenarios and finalize a model report documenting the updated scenarios.

- Run up to 12 additional modeling scenarios to determine where required loading reductions may be achieved
- Finalize a modeling report that explains the modeling process and summarizes the modeling results, including the additional scenarios

### **Task 5A – Run Additional Model Scenarios (Base Year Only)**

The Contractor shall run up to 12 scenarios using the calibrated SWATsalt model. The number and specific scenarios to be run will depend on the work completed with existing technical support. Final direction on scenarios will be provided by EPA through discussions with the Contractor and MDEQ. A summary of the 12 potential scenarios is provided below:

#### **Coal Bed Methane (CBM) Scenarios**

1. Remove all CBM discharges using estimated discharge loads
2. Limit all CBM discharges to instream standards of 1,000 SC and 3.0 SAR and estimated discharge volumes to surface water

3. Discharge all CBM directly to surface water using documented discharge volumes and estimated salinity concentrations

#### Coal Mine (West Decker and East Decker) Scenarios

4. Remove coal mine discharges based on loads from Discharge Monitoring Reports (DMRs)
5. Set coal mine discharge volumes to DMR values and concentrations to permit limits during the modeling period: 3,000 for SC (West Decker); 14 for SAR (West Decker); and 17.8 for SAR (East Decker)

#### Agricultural Scenarios

6. Remove all agriculture from the modeled portion of the watershed in Montana below the dam
7. Incorporate land use change simulating a growth of irrigated agriculture on Northern Cheyenne Tribe (NCT) lands

#### Natural Scenario

8. Remove all human impacts, including agriculture in Wyoming by extrapolating reductions from scenario #6, while keeping the Tongue River Dam in place

#### Dam Management Scenario

9. Simulate augmented/pulsed flows from the dam in months when SC is exceeded downstream

#### Combined Scenarios

10. All TMDL allocation reductions - this will be determined in consultation with EPA and MDEQ based on the results of scenarios 1-9 and will likely involve partial scenario reductions (e.g., reduce agricultural loading in MT by 2% instead of removing all) and reductions assigned outside the core model area (e.g., upstream).
11. All TMDL allocation reductions + dam management scenario #9
12. All TMDL allocation reductions + dam management scenario #9 + NCT agriculture growth #7

Deliverables: SWATsalt model input/output files plus any associated spreadsheets, databases and references used to determine variables and assumptions for the revised model and scenario runs.

#### **Task 5B – Finalize Modeling Report (Base Year Only)**

The Contractor shall update the modeling report to explain the additional scenario runs so that the final report describes the process for selecting, setting up, and calibrating the SWATsalt model including a discussion of key input data, modeling assumptions, model calibration process, and results of model scenario runs. The final report shall address all comments and incorporate all edits made by EPA/MDEQ on the draft report.

Deliverables: 1) Draft modeling report (MS Word); 2) Final modeling report

#### **Task 6 – Wyoming Crow Creek TMDL (Base Year Only)**

The Crow Creek Watershed is located in Laramie and Albany Counties of southeastern Wyoming. Crow Creek begins at the confluence of North Fork Crow Creek and Middle Fork Crow Creek approximately 8.5

miles west of Cheyenne and flows east/southeast to its confluence with the South Platte River in Colorado. The Crow Creek project area is represented by suburban, urban, industrial, and grazing areas in and around the city of Cheyenne. Wyoming DEQ's (WDEQ) CWA Section 303(d) program Vision lists the sedimentation/siltation impairment on Crow Creek as a high priority and has committed to completing TMDLs to address the impairments by September 30<sup>th</sup>, 2022.

Existing contractor support assigned to developing Vision plans in Wyoming has discovered several unanticipated complexities in the Crow Creek Watershed that have delayed TMDL development including incomplete documentation of the existing model relied upon for TMDL conclusions and challenges assessing the contributions from the Cheyenne MS4 and multiple permitted industrial and sanitary wastewater treatment facilities.

The purpose of this Task is to help WDEQ complete the Crow Creek Sediment TMDL so that it meets all Clean Water Act requirements and is in a form that is approvable by EPA. The work may require the Contractor to:

- Review state, county, and other water quality documents for the watershed
- Compile and analyze available water quality data
- Create graphs and load duration curves
- Create GIS maps
- Conduct and write source assessments
- Write portions of the watershed document
- Assign total maximum daily loads, wasteload allocations, and load allocations
- Compile and respond to public comments
- Present information to federal and state agencies

Deliverables: 1) Draft Crow Creek Sediment TMDL (MS Word); 2) Final Crow Creek Sediment TMDL

## C. SCHEDULE OF BENCHMARKS & DELIVERABLES:

Task #	BENCHMARK, DELIVERABLE or MILESTONE	SCHEDULE
1.0	Develop and Finalize QAPP	Within 30 days of TO award.
2.0	Kick-off meeting	Within ten days of QAPP approval.
3.0	Progress reports	Monthly for life of the TO
4.0	Support for Development of Assessment Methods for Montana and Wyoming	
4A	Develop Draft Parameter-Specific Assessment Methods for Wyoming and Montana Based on State Specific Needs and Approaches	Deliverables to be completed within 1 year of TO award
4B	Assistance with Improving Data Downloads and Automating Data Analyses	Deliverables to be completed within 18 months of TO award
4C	Assist with Waterbody-specific Analyses for Wyoming and Montana	Deliverables to be completed within 24 months of TO award
5	Tongue River SWATsalt Model Scenarios and Documentation	
5A	Run Additional SWATsalt Model Scenarios	Deliverables to be completed within 1 year of TO award
5B	Finalize SWATsalt Model Report	Deliverables to be completed within 1 year of TO award
6	Complete Crow Creek Sediment TMDL	Deliverables to be completed within 10 months of TO award

## **D. REPORTING**

The Contractor shall participate in status phone calls with the TOCOR on an as-needed basis. The TOCOR shall provide the Contractor with a one-week notice of any scheduled status calls. All documentation and reporting under this TO shall be in compliance with contract requirements.

The Contractor shall prepare and furnish each month to the TOCOR a written summary of work performed, and progress towards the schedule of benchmarks, deliverables and milestones which has been accomplished each month. The Contractor shall also include in this item a brief written summary of any challenges encountered in the appropriate month.

In addition, the Contractor shall identify and briefly describe in the written monthly report those QA / QC activities which were performed to support implementation of this TO, and furnish a brief written description of: problems encountered, and any deviations were occurred from: the Quality Management Plan, any Standard Operating Procedures, checklists, or other Quality Assurance guidance, as well as a description of the corrective actions taken.

## **E. CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

## **F. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS**

The Contractor shall immediately notify the EPA Contracting Officer and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

## **G. QUALITY ASSURANCE SURVEILLANCE PLAN**

See Appendix A for details.

## H. NOTIFICATION OF COMPLETION OF TASK ORDER DELIVERABLES

In the event this task order reaches thirty (30) days prior to the end of the Period of Performance in a given period, and the Contractor assesses that the Contractor will not be able to satisfactorily complete any of the benchmarks, milestones, or deliverables by the end of the Performance Period, the Contractor shall notify the TOCOR and the Contracting Officer (CO) immediately, in writing. Within five (5) business days of said notification, the TOCOR, in coordination with the CO, will provide technical direction concerning use of the remaining funding to prepare and furnish to the TOCOR: draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

# ATTACHMENT 1

## QUALITY ASSURANCE SURVEILLANCE PLAN

### “Support for EPA Region 8 Watershed Program”

Purpose: The requirements performed under this contract are considered performance-based, focusing on the Agency’s desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency’s performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor’s performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the “Contractor Performance Evaluation” clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer’s Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b> The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer’s Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA’s consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor’s attention through the EPA CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.  Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations.
<b>Timeliness:</b> Services and deliverables shall be in accordance with schedules	During any period of performance, 90% of all submitted	100% of active task orders under the contract will be	<b>Unsatisfactory</b> rating under the category of Timeliness in the CPARS

<p>stated in each task orders, unless amended or modified by an approved EPA action.</p>	<p>deliverables shall be submitted no later than one business day past the due date.</p>	<p>reviewed by the EPA TOCOR monthly (via Monthly Progress Report &amp; milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.</p>	<p>when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Timeliness</b> if the contractor meets the measurable performance standards.</p>
<p><b>Cost Management and Control:</b> The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.</p>	<p>The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.</p>	<p>The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.</p>	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.</p>
<p><b>Technical Effort:</b> The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work</p>	<p>All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the</p>	<p>EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.</p>	<p><b>Unsatisfactory</b> rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p>



<p>requiring the Contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.</p>	<p>TOCOR in written technical direction, and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.</p>		<p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Quality of Product or Service</b> if the contractor meets the measurable performance standards.</p>
<p><b>Quality Assurance/Quality Control (QA/QC):</b> The Contractor shall comply with the quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (<a href="http://www.epa.gov/quality/qs-docs/r5-final.pdf">http://www.epa.gov/quality/qs-docs/r5-final.pdf</a>) and as required by the EPA TOCOR. The Contractor shall assign appropriately leveled and skilled technical and quality assurance personnel to develop a Quality Assurance Project Plan (QAPP) for all tasks requiring collection or use of environmental data.</p> <p>The QAPP shall be developed in consultation with the EPA TOCOR, and fully approved by the appropriate EPA personnel, before initiation of activities involving environmental data collection or use.</p> <p>Any change in the planned environmental data activities that become necessary during the course of the project shall be fully documented in approved revised versions of the QAPP prior to their implementation.</p>	<p>The Contractor shall notify the EPA TOCOR of any issues that impact project quality within 3 business days of occurrence.</p> <p>The Contractor shall notify the EPA TOCOR and COR within 5 business days of occurrence of any requests to collect or use environmental data without an EPA-approved QAPP.</p> <p>The Contractor shall document all QA/QC activities, including compliance with the quality objectives specified in the QAPP, in Monthly Progress Reports.</p>	<p>100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to assess contractor compliance with the approved QAPP, and to identify unreported issues related to project quality and requests to collect or use environmental data without an EPA-approved QAPP. The EPA TOCOR will report any issues to the EPA QAO and COR, who will bring the issue(s) to the Contractor's attention through the EPA CO for immediate resolution.</p>	<p><b>Unsatisfactory</b> rating under the category of Quality Assurance/Quality Control in the CPARS if more than three incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality Assurance/Quality Control if the contractor meets the measurable performance standards.</p>

### ATTACHMENT 3 QUALITY ASSURANCE SURVEILLANCE PLAN

#### “Technical Support for Assessing, Managing, and Communicating the Ecological and Human Health Risks of Contaminants in Water, Fish, and Sediments, and of Microbial Pathogens in Surface Waters”

Purpose: The requirements performed under this contract are considered performance-based, focusing on the Agency’s desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency’s performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor’s performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the “Contractor Performance Evaluation” clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer’s Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b> The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer’s Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA’s consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor’s attention through the EPA CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.  Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations.
<b>Timeliness:</b> Services and deliverables shall be in accordance with schedules	During any period of performance, 90% of all submitted	100% of active task orders under the contract will be	<b>Unsatisfactory</b> rating under the category of Timeliness in the CPARS

stated in each task orders, unless amended or modified by an approved EPA action.	deliverables shall be submitted no later than one business day past the due date.	reviewed by the EPA TOCOR monthly (via Monthly Progress Report & milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	<p>when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Timeliness</b> if the contractor meets the measurable performance standards.</p>
<p><b>Cost Management and Control:</b> The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.</p>	The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.	The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.</p>
<p><b>Technical Effort:</b> The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work requiring the Contractor to provide options or recommendations shall</p>	All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the TOCOR in written	EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.	<p><b>Unsatisfactory</b> rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p> <p>A satisfactory rating will be reported in the CPARS</p>

include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	technical direction, and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.		Performance Evaluation System under the category of <b>Quality of Product or Service</b> if the contractor meets the measurable performance standards.
<p><b>Quality Assurance/Quality Control (QA/QC):</b> The Contractor shall comply with the quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (<a href="http://www.epa.gov/quality/qs-docs/r5-final.pdf">http://www.epa.gov/quality/qs-docs/r5-final.pdf</a>) and as required by the EPA TOCOR. The Contractor shall assign appropriately leveled and skilled technical and quality assurance personnel to develop a Quality Assurance Project Plan (QAPP) for all tasks requiring collection or use of environmental data.</p> <p>The QAPP shall be developed in consultation with the EPA TOCOR, and fully approved by the appropriate EPA personnel, before initiation of activities involving environmental data collection or use.</p> <p>Any change in the planned environmental data activities that become necessary during the course of the project shall be fully documented in approved revised versions of the QAPP prior to their implementation.</p>	<p>The Contractor shall notify the EPA TOCOR of any issues that impact project quality within 3 business days of occurrence.</p> <p>The Contractor shall notify the EPA TOCOR and COR within 5 business days of occurrence of any requests to collect or use environmental data without an EPA-approved QAPP.</p> <p>The Contractor shall document all QA/QC activities, including compliance with the quality objectives specified in the QAPP, in Monthly Progress Reports.</p>	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to assess contractor compliance with the approved QAPP, and to identify unreported issues related to project quality and requests to collect or use environmental data without an EPA-approved QAPP. The EPA TOCOR will report any issues to the EPA QAO and COR, who will bring the issue(s) to the Contractor's attention through the EPA CO for immediate resolution.	<p><b>Unsatisfactory</b> rating under the category of Quality Assurance/Quality Control in the CPARS if more than three incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality Assurance/Quality Control if the contractor meets the measurable performance standards.</p>

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 4	
2. AMENDMENT/MODIFICATION NO. P00001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. PR-R8-22-00513	
6. ISSUED BY CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001		7. ADMINISTERED BY (If other than Item 6) CODE		5. PROJECT NO. (If applicable)	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TETRA TECH, INC. Attn: Andrew Parker 10306 EATON PL STE 340 FAIRFAX VA 220302201		(X)		9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERC20D0016 68HERC21F0351	
				10B. DATED (SEE ITEM 13) 08/12/2021	
CODE X38LAAB5HB64		FACILITY CODE			

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Decrease: -\$150,000.00  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) IAW EPA-B-32-103 Limitation of Government's Obligation

**E. IMPORTANT:** Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

UEI: X38LAAB5HB64

TOCOR: Tina Laidlaw Invoice Approver: TINA LAIDLAW Alt Invoice App: PETER BRUMM

The purpose of modification P00001 is to:

1. Deobligate \$150,000.00 from the task order.
2. The obligated amount for the task order is reduced by \$150,000.00 from \$275,000.00 to \$125,000.00
3. Update Local Clause EPA-B-32-103 Limitation of Government's Obligation.
4. Change the buyer and contracting officer to Kimberly F. Loesch
5. All other terms and conditions remain unchanged.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Kimberly F. Loesch	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 06/22/2022

Previous edition unusable

NAME OF OFFEROR OR CONTRACTOR  
TETRA TECH, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>LIST OF CHANGES:</p> <p>CHANGES FOR LINE ITEM NUMBER: 0001</p> <p>CHANGES FOR ACCOUNTING CODE: 21-22-B-87FT-000BD4-2505-2187TE4005-001 Amount changed from \$225,000.00 to \$75,000.00</p> <p>Period of Performance: 08/12/2021 to 08/11/2022</p>				

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

- (a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$125,000.00 of the total price is presently available for payment and allotted to this item.
- (b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.
- (c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."
- (d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.
- (e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.
- (f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.
- (g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".
- (h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

Mod P00001  
TO 68HERC20F0351  
Contract 68HERC20D0016

RECAPITULATION:

RECAPITULATION OF FUNDING TO DATE		
CONTRACT NO. 68HERC20D0016		
TASK ORDER NO. 68HERC21F0351		
BASE Period of Performance - FROM 08/12/2021 through 08/11/2022		
<u>FUNDING ACTION</u>	<u>FUNDING</u>	<u>TOTAL AMOUNT</u>
Total BASE Period Amount:		\$277,852.88
Initial Incremental Funding:	\$275,000.00	
Modification P00001 deobligate \$150,000.00	-\$150,000.00	
Total Funded		\$125,000.00
Balance Unfunded		\$152,852.88



ORDER FOR SUPPLIES OR SERVICES						PAGE OF PAGES		
						1	13	
IMPORTANT: Mark all packages and papers with contract and/or order numbers.								
1. DATE OF ORDER 08/17/2021		2. CONTRACT NO. (If any) 68HERC20D0016		6. SHIP TO:				
3. ORDER NO. 68HERC21F0357		4. REQUISITION/REFERENCE NO. PR-R9-21-00653		a. NAME OF CONSIGNEE  CAD				
5. ISSUING OFFICE (Address correspondence to) CAD  US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136				
				c. CITY Cincinnati		d. STATE OH	e. ZIP CODE 45268-0001	
7. TO: Andrew Parker				f. SHIP VIA				
a. NAME OF CONTRACTOR TETRA TECH, INC.				8. TYPE OF ORDER  <input type="checkbox"/> a. PURCHASE REFERENCE YOUR:    Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.				
b. COMPANY NAME								
c. STREET ADDRESS 10306 EATON PL STE 340				<input checked="" type="checkbox"/> b. DELIVERY  Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.				
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220302201					
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OW				
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB						12. F.O.B. POINT		
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 06/30/2022		16. DISCOUNT TERMS		
a. INSPECTION Destination		b. ACCEPTANCE Destination						
17. SCHEDULE (See reverse for Rejections)								
ITEM NO. (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 198549560 TOCOR: Matthew Mitchell Invoice Approver: MMITCHELL Alt Invoice App: DGUILIANO  Continued ...							
SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		\$118,918.10	17(h) TOTAL (Cont. pages) ▲
	21. MAIL INVOICE TO:							
	a. NAME		RTP Finance Center					
	b. STREET ADDRESS (or P.O. Box)		US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts					
c. CITY		d. STATE		e. ZIP CODE		\$45,906.63	17(i) GRAND TOTAL ▲	
Durham		NC		27711				
22. UNITED STATES OF AMERICA BY (Signature)				08/17/2021		23. NAME (Typed) Keith Pfeffer TITLE: CONTRACTING/ORDERING OFFICER		

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
2

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 08/17/2021	CONTRACT NO. 68HERC20D0016	ORDER NO. 68HERC21F0357
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 08/17/2021 to 06/30/2022  Base Period - Region 9 Endangered Species Act/Essential Fish Habitat Practice Guide  Accounting Info: 20-21-B-09LD-000BD4-2505-2109W21502-00 1 BFY: 20 EFY: 21 Fund: B Budget Org: 09LD Program (PRC): 000BD4 Budget (BOC): 2505 DCN - Line ID: 2109W21502-001 Funding Flag: Partial Funded: \$45,140.00 Accounting Info: 21-22-B-09LD-000BD4-2505-2109W21502-00 2 BFY: 21 EFY: 22 Fund: B Budget Org: 09LD Program (PRC): 000BD4 Budget (BOC): 2505 DCN - Line ID: 2109W21502-002 Funding Flag: Partial Funded: \$766.63				45,906.63	
0002	Option Period 1 (Option Line Item) 06/01/2022				43,820.18	
0003	Option Period 2 (Option Line Item) 06/01/2023				29,191.29	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$118,918.10

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable; however, as a Firm-Fixed-Price line item, it shall not be incrementally funded. For this item, the total Firm-Fixed-Price of \$45,906.63 is presently available for payment and allotted to this contract.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule: N/A – Line Item 0001 is fully funded.

## **SECTION F - Deliveries or Performance**

### **F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE**

The period of performance for line item 0001 of this Task Order period shall be from AWARD through 06/30/2022, inclusive of all required reports.

The period of performance for line item 0002 of this Task Order period shall be from 07/01/2022 through 06/30/2023, inclusive of all required reports, if exercised.

The period of performance for line item 0003 of this Task Order period shall be from 07/01/2023 through 06/30/2024, inclusive of all required reports, if exercised.

## **SECTION G - Contract Administration Data**

### **G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES**

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Matt Mitchell, 415-972-3508, mitchell.matthew@epa.gov	(TOCOR)
Dave Guiliano, 415-947-4133, guiliano.dave@epa.gov	(Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Kim Loesch, 513-487-2058, loesch.kimberly@epa.gov	(Contracting Officer)
Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov	(Contracting Officer)
Ernie Forrest, 513-569-7414, forrest.earnest@epa.gov	(Contract Specialist)

## **PERFORMANCE WORK STATEMENT**

### **CONTRACT 68HERC20D0016 TASK ORDER 68HERC21F0357**

**A. TITLE:** Region 9 Endangered Species Act/Essential Fish Habitat Practice Guide

**B. PERIOD OF PERFORMANCE:**

Base – Task Order Award through June 30, 2022

Option Period 1 – July 1, 2022 through June 30, 2023

Option Period 2 – July 1, 2023 through June 30, 2024

**TASK ORDER CONTRACT OFFICER REPRESENTATIVE (TOCOR):**

Matthew Mitchell

U.S. EPA

Phone: 415-972-3508

E-mail: mitchell.matthew@epa.gov

**ALTERNATE**

**TASK ORDER CONTRACT OFFICER REPRESENTATIVE (Alt-COR)**

Dave Guiliano

U.S. EPA

Phone 415-947-4133

E-mail: guiliano.dave@epa.gov

**C. BACKGROUND, PURPOSE AND SCOPE**

The 1973 Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq.*, was enacted to protect and conserve endangered and threatened species and critical habitat. The Fish and Wildlife Service (FWS) of the Department of the Interior and the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce (collectively *the Services*) share primary responsibility for administration of the ESA. ESA section 7 requires that federal agencies consult with the Services to ensure that any action authorized, funded, or carried out by the agencies that could affect a listed species or critical habitat and to ensure that their actions are not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of critical habitat of such species. The ESA section 7 regulations are in 50 CFR Part 402. EPA falls under these regulations and is required to consult with the Services to ensure that EPA's action does not adversely impact the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat of such species.

Consultation may be either informal or formal. An informal consultation in the form of a biological evaluation determines if an action is or is not likely to adversely affect the species. A formal consultation is required if the findings from the informal consultation show that there is a likelihood for adverse impacts and evaluates whether the proposed action is likely to jeopardize the continued existence of the species. EPA Region 9 is required to develop and submit Biological Evaluations (BE) to demonstrate that EPA's action is unlikely to cause adverse effects of the action on listed and

proposed species and designated and proposed critical habitat and demonstrates that any such species or habitat to the FWS/NMFS for review and approval. The Services review of the biological evaluation and the outcome of this informal consultation determine whether formal consultation or a conference is necessary.

EPA also has responsibilities to consult on Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act to ensure we are not adversely affecting habitats necessary for healthy, productive fish stocks. The contractor shall provide technical support to guide EPA Region 9 in fulfilling our consultation responsibilities under ESA section 7 and the Magnuson-Stevens Act. The specific tasks and any subtasks are defined below.

EPA conducts several activities that are subject to ESA/EFH consultation requirements, including approval of water quality standards, issuance of NPDES permits, designation of sites for ocean disposal, and issuing permits for ocean disposal. The contractor shall draft sections of an ESA handbook to assist EPA staff in more efficiently fulfilling our ESA/EFH responsibilities. The handbook will cover general ESA/EFH responsibilities, timeframes, common issues, as well as example ESA/EFH documentation (i.e. BEs) specific to different EPA actions, such as water quality standards actions. The contractor will also compile and index biological evaluations (BEs) and ensure that they are searchable using an internal EPA tool. The contractor shall identify existing EPA efforts on ESA information gathering projects to ensure that handbook builds upon other agency efforts and avoids duplicating them.

The contractor, in coordinating with EPA TOCOR, may directly contact the Services to obtain additional information but shall copy EPA on all information requests and document all requests and responses for EPA. The contractor shall inform the EPA TOCOR of any such information requirements. The contractor shall only follow technical direction received from the EPA TOCOR.

## **D. TASKS**

This Task Order (TO) includes a base requirement consisting of Task 1, Task 2.A, Task 2.B, and Task 3.

Tasks 2.C, 2.D, and 2.E are reserved for future option periods (see Section E - Schedule of Benchmarks and Deliverables).

### **TASK 1: KICK-OFF CALL AND MONTHLY PROGRESS REPORTS**

The contractor shall schedule a kick-off call with the EPA to review overall goals of the project and details regarding implementation of the TO. Roles and responsibilities for completing the tasks below will be discussed. The kick-off call shall be scheduled within 10 working days of award at a mutually agreed upon time. During the kick-off call the contractor and EPA TOCOR will schedule monthly technical calls.

The contractor shall write and submit monthly progress reports via e-mail to the EPA TOCOR until the completion of the project. Progress reports shall describe completed work during the invoice period and should link to charges described in invoice documentation. The monthly progress reports shall provide the following information:

- Contract and TO number, reporting period, and contact information: This information serves as heading to the report;
- Progress made during the report period: Activities completed toward completion of deliverables, including those regarding quality assurance;
- Deliverables: Schedule showing completed and upcoming deliverables;
- Projected activity for the next reporting period: Activities to be completed toward completion of deliverables;
- Project variances and outstanding issues: Describe deviations from work schedules, budget and any impediments encountered along with how they were or will be resolved;
- Subcontracting: Provide an update on subcontractor use; and
- Financial status: Information on financial status, including level of effort hours and cost for the reporting period, in addition to a breakdown of level of effort hours and cost by activity, accumulated costs to date, and available funds remaining.

The EPA TOCOR may also initiate verbal communications with the contractor on an as needed basis to determine project status.

Deliverables: kick-off call and monthly progress reports.

## **TASK 2: DEVELOP AN ESA/EFH HANDBOOK TO GUIDE EPA REGION 9 IN FULLFILLING ITS CONSULTATION RESPONSIBILITIES**

The overall project is development of an ESA/EFH handbook. The handbook will cover general ESA/EFH responsibilities, timeframes, common issues, as well as example ESA/EFH documentation (i.e. BEs) specific to different EPA actions, such as water quality standards actions. The format of the handbook will be determined based on feedback beginning at the kickoff.

To the extent possible, the contractor shall write deliverables using the active voice and 12-point Times New Roman. The deliverables, by EPA's efforts alone, may be placed on a cloud based internal platform such as SharePoint or Microsoft Teams; the contractor shall create the deliverables with that in mind.

### Task 2.A

Develop a chapter discussing ESA/EFH issues specific to EPA's responsibilities to review and act upon water quality standards. The handbook chapter will describe which EPA actions are subject to consultation, describe common issues around the terms impacting the scope of EPA's consultation responsibilities described in the introductory chapter and provide examples or case studies to illustrate the issues. Additional technical direction, including the schedule of deliverables will be given regarding the water quality standards chapter.

### Task 2.B

Develop a chapter the describes the organizational structure of the Services, including the field offices in EPA Region 9's area of responsibility. To the extent available, include contact information and phone number for the Services' managers. Additional technical direction will be given regarding the contacts chapter.

#### Task 2.C

Develop an introductory handbook chapter that orients the reader to the ESA. The handbook chapter will describe relevant portions of ESA that impact EPA and include a generalized outline for the consultation process. The handbook chapter will also define and discuss relevant terms that impact the scope of EPA's consultation responsibilities such as action area, secondary impacts and other similar terms. The introductory chapter will also include timeframes for EPA's consultation responsibilities. Develop a similar chapter for EFH. Additional technical direction, including the schedule of deliverables will be given regarding the introductory chapters.

#### Task 2.D

Develop a chapter discussing ESA/EFH issues specific to EPA's responsibilities to designate and manage ocean disposal sites and to permit the disposal of certain materials into those sites. The handbook chapter will describe which EPA actions are subject to consultation, describe common issues around the terms impacting the scope of EPA's consultation responsibilities described in the introductory chapter and provide examples or case studies to illustrate the issues. Additional technical direction, including the schedule of deliverables will be given regarding the ocean disposal chapter.

#### Task 2.E

Develop a chapter discussing ESA/EFH issues specific to EPA's responsibilities to issue NPDES permits. The handbook chapter will incorporate the ESA/EFH standard operating procedures developed by EPA Region 9, using the same format as the chapters described in Tasks 2.B and 2.C. To the extent the ESA/EFH standard operating procedures do not describe which EPA actions are subject to consultation, describe common issues around the terms impacting the scope of EPA's consultation responsibilities described in the introductory chapter and provide examples or case studies to illustrate the issues, those will be added. Additional technical direction will be given regarding the NPDES chapter.

### **TASK 3: COMPILE AND INDEX BIOLOGICAL EVALUATIONS COVERING COMMON REGION 9 SPECIES**

The deliverables, by EPA's efforts alone, may be moved to a cloud-based internal platform such as SharePoint or Microsoft Teams; the contractor shall create the deliverables with that in mind.

The contractor will compile and index biological evaluations (BEs) and ensure that they are searchable using an internal EPA tool. The BEs should include species in EPA Region 9's area of responsibility. The BEs should be searchable by species as well as constituent of concern (i.e. cobalt or selenium). Additional technical direction, including the schedule of deliverables will be given regarding Task 3.

#### **E. SCHEDULE OF BENCHMARKS & DELIVERABLES:**

**Note:** Unless otherwise specified in this schedule, EPA TOCOR shall provide written comments on all draft deliverables within 15 business days of receipt of EPA's receipt of deliverables. Unless otherwise specified, Contractor shall incorporate written comments and provide revisions to EPA TOCOR within 15 business days of receipt of EPA TOCOR's comments.

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<b>Task # or PWS Section #</b>	<b>BENCHMARK, DELIVERABLE or MILESTONE</b>	<b>SCHEDULE</b>
1	Kickoff Phone Call Monthly Progress Reports	Phone call w/in 10 business days of the TO award. Monthly progress reports be submitted to TOCOR within three (3) calendar days of invoice submission to EPA.
2.A	Water Quality Standards Chapter	In accordance with technical direction, but no later than 90 days after the TO award.
2.B	Contacts Chapter	The EPA TOCOR will issue technical direction to the contractor prior to any work on deliverables within Task 2.B.
2.C	Introductory Chapter	Schedule will be determined upon the exercise of Option Period 1.
2.D	Ocean Disposal Chapter	Schedule will be determined upon the exercise of Option Period 1.
2.E	NPDES Chapter	Schedule will be determined upon the exercise of Option Period 2.
3	Biological Evaluation Compilation	In accordance with technical direction, but no later than June 30, 2022.

## **F. DELIVERABLES**

1. For each deliverable submitted electronically, the contractor shall submit electronic copies to both EPA in a format that EPA can support. The deliverables, by EPA's efforts alone, may be moved online; the contractor shall create the deliverables with that in mind. Deliverables shall be submitted through electronic mail, or through another method determined mutually acceptable by the contractor and EPA.
2. The contractor shall reflect a thorough understanding of national and State statutes, regulations, court rulings, policy and guidance. Final deliverables shall reflect all comments from EPA. The contractor shall provide quality assurance reporting as necessary and specifically identified in each technical directive issued by the EPA TOCOR.
3. Draft documents will be submitted through the EPA TOCOR and Technical Contact (if provided), to provide for appropriate EPA staff review and comment. The contractor shall incorporate comments provided by Region 9 on draft materials. Each deliverable shall be submitted in draft by the initial due date unless otherwise noted in this PWS. The EPA TOCOR will review the draft deliverables and provide comments. The contractor shall respond to these comments within seven (7) workdays unless otherwise specified in this PWS or otherwise directed by the EPA TOCOR. Initial response to comments can be through electronic mail. Deliverables shall be revised upon direction from the EPA TOCOR within a time frame mutually agreed upon by the EPA TOCOR and the contractor, but within at least three (3) work days and no more than 30 work days. The EPA TOCOR will determine whether a deliverable is in an approvable and/or acceptable form. The EPA TOCOR's determination will be

based on the contractor's clarifications and/or revisions, including any necessary re-submittals. Written technical direction from the EPA TOCOR can be through electronic mail.

## **G. REPORTING**

All documentation and reporting under this Task Order shall be in compliance with contract requirements. Reference Contract Clause C-1 (c) and Attachment 1, PWS, Section 2.5.3.4, 3.7, and 4.3.7. See contract clause F.2, F.3, and J.2 "List of Attachments, Number 2 - Reports of Work".

## **H. ANTICIPATED TRAVEL**

No travel is expected for this project.

## **I. CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

Any questions raised by the public regarding EPA policy should be responded to by EPA representatives, not contractor personnel. If EPA is not available to respond, the contractor shall provide the public with an appropriate agency contact.

## **J. VALIDATION OF TASK ORDER DELIVERABLES FOR SECTION 508 COMPLIANCE**

The Contractor shall support the TOCOR in conducting a "Final Deliverable Validation" to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to "electronic and information technology (EIT) deliverables". The contractor shall furnish certification, in writing, to the TOCOR that the Contractor has complied with EPAAR Clause 1552.211-79 "Compliance with EPA Policies for Information Resources Management" (Reference Contract Clause C-1), including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/> Reference Contract Clause C-1 (c) and Attachment 1, PWS, Section 2.5.3.4, 3.7, and 4.3.7.

## **K. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS**

Events involving support and related expenses for a meeting, conference, workshop, symposium, retreat, seminar or training are not authorized or required.

## **L. NOTIFICATION OF COMPLETION OF TO DELIVERABLES**

In the event that the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period and the Contractor assesses that the deliverables, benchmarks or milestones will not

be able to be completed, the Contractor shall immediately furnish written notification to the EPA TOCOR and the Contracting Officer (CO).

Within five (5) business days of receiving this written notification, the EPA TOCOR in coordination with the CO will provide written technical direction to the contractor concerning use of the funds which remain in the Task Order to prepare draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA, and furnish these to the EPA TOCOR.

#### **M. SUPPORTING DOCUMENTS AND GUIDANCE**

The Documents referred to below are available in hard copy upon request.

#### **SUPPORTING DOCUMENTS AND GUIDANCE**

- *“EPA Region 9 NPDES SOPs for Endangered Species Act and Essential Fish Habitat”*
- *QASP form is attached to the Procurement Request*

### ATTACHMENT 3 QUALITY ASSURANCE SURVEILLANCE PLAN

#### “Technical Support for Assessing, Managing, and Communicating the Ecological and Human Health Risks of Contaminants in Water, Fish, and Sediments, and of Microbial Pathogens in Surface Waters”

Purpose: The requirements performed under this contract are considered performance-based, focusing on the Agency’s desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency’s performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor’s performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the “Contractor Performance Evaluation” clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer’s Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b> The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer’s Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA’s consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor’s attention through the EPA CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.  Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations.
<b>Timeliness:</b> Services and deliverables shall be in accordance with schedules	During any period of performance, 90% of all submitted	100% of active task orders under the contract will be	<b>Unsatisfactory</b> rating under the category of Timeliness in the CPARS

stated in each task orders, unless amended or modified by an approved EPA action.	deliverables shall be submitted no later than one business day past the due date.	reviewed by the EPA TOCOR monthly (via Monthly Progress Report & milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	<p>when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Timeliness</b> if the contractor meets the measurable performance standards.</p>
<p><b>Cost Management and Control:</b> The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.</p>	The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.	The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.</p>
<p><b>Technical Effort:</b> The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work requiring the Contractor to provide options or recommendations shall</p>	All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the TOCOR in written	EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.	<p><b>Unsatisfactory</b> rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p> <p>A satisfactory rating will be reported in the CPARS</p>

include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	technical direction, and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.		Performance Evaluation System under the category of <b>Quality of Product or Service</b> if the contractor meets the measurable performance standards.
<p><b>Quality Assurance/Quality Control (QA/QC):</b> The Contractor shall comply with the quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (<a href="http://www.epa.gov/quality/qs-docs/r5-final.pdf">http://www.epa.gov/quality/qs-docs/r5-final.pdf</a>) and as required by the EPA TOCOR. The Contractor shall assign appropriately leveled and skilled technical and quality assurance personnel to develop a Quality Assurance Project Plan (QAPP) for all tasks requiring collection or use of environmental data.</p> <p>The QAPP shall be developed in consultation with the EPA TOCOR, and fully approved by the appropriate EPA personnel, before initiation of activities involving environmental data collection or use.</p> <p>Any change in the planned environmental data activities that become necessary during the course of the project shall be fully documented in approved revised versions of the QAPP prior to their implementation.</p>	<p>The Contractor shall notify the EPA TOCOR of any issues that impact project quality within 3 business days of occurrence.</p> <p>The Contractor shall notify the EPA TOCOR and COR within 5 business days of occurrence of any requests to collect or use environmental data without an EPA-approved QAPP.</p> <p>The Contractor shall document all QA/QC activities, including compliance with the quality objectives specified in the QAPP, in Monthly Progress Reports.</p>	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to assess contractor compliance with the approved QAPP, and to identify unreported issues related to project quality and requests to collect or use environmental data without an EPA-approved QAPP. The EPA TOCOR will report any issues to the EPA QAO and COR, who will bring the issue(s) to the Contractor's attention through the EPA CO for immediate resolution.	<p><b>Unsatisfactory</b> rating under the category of Quality Assurance/Quality Control in the CPARS if more than three incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality Assurance/Quality Control if the contractor meets the measurable performance standards.</p>

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 08/19/2021		2. CONTRACT NO. (If any) 68HERC20D0016		6. SHIP TO:	
3. ORDER NO. 68HERC21F0359		4. REQUISITION/REFERENCE NO. PR-OAR-21-01133		a. NAME OF CONSIGNEE  OAR/OAP	
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62101J OAR/OAP	
				c. CITY Washington	e. ZIP CODE 20460
7. TO: Andrew Parker				f. SHIP VIA	
a. NAME OF CONTRACTOR TETRA TECH, INC.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 10306 EATON PL STE 340				REFERENCE YOUR:  Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220302201	Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OW	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
12. F.O.B. POINT					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 08/18/2022	
a. INSPECTION Destination	b. ACCEPTANCE Destination			16. DISCOUNT TERMS	

## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 198549560 TOCOR: Denise Mulholland Invoice Approver: DMULHOLLAND Alt Invoice App: MSHIMAMURA  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$0.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						
c. CITY Durham				d. STATE NC	e. ZIP CODE 27711	\$160,701.00	17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature) 08/19/2021

23. NAME (Typed)  
Keith Pfeffer  
TITLE: CONTRACTING/ORDERING OFFICER

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
2

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 08/19/2021	CONTRACT NO. 68HERC20D0016	ORDER NO. 68HERC21F0359
-----------------------------	-------------------------------	----------------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Accounting Info: 21-22-B-58F4-000A46XP4-2505-2158FC0108-001 BFY: 21 EFY: 22 Fund: B Budget Org: 58F4 Program (PRC): 000A46XP4 Budget (BOC): 2505 DCN - Line ID: 2158FC0108-001 Period of Performance: 08/19/2021 to 08/18/2022  Base Period - Technical Support for International Methane Reductions  Time-and-Materials Line Item  See attached Funding Recap sheet for incremental funding amount associated with this award					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00



## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

- (a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$68,063.70 of the total price is presently available for payment and allotted to this item.
- (b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.
- (c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."
- (d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.
- (e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.
- (f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.
- (g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".
- (h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC20D0016**  
**TASK ORDER NO. 68HERC21F0359**

**BASE Period of Performance - FROM 08/19/2021 through 08/18/2022**

<b><u>FUNDING ACTION</u></b>	<b><u>FUNDING</u></b>	
<b>Total BASE Period Amount:</b>	\$	160,701.00
Initial Incremental Funding:	\$	68,063.70
Balance Unfunded	\$	92,637.30

**SECTION F - Deliveries or Performance**

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance for line item 0001 (Base Period) of this Task Order shall be from 08/19/2021 through 08/18/2022, inclusive of all required reports.

**SECTION G - Contract Administration Data**

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Denise Mulholland, 202-297-0624, mulholland.denise@epa.gov (TOCOR)  
Monica Shimamura, 202-641-0589, shimamura.monica@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)  
Kim Loesch, 513-487-2058, loesch.kimberly@epa.gov (Contracting Officer)  
Ernie Forrest, 513-569-7414, forrest.earnest@epa.gov (Contract Specialist)

## PERFORMANCE WORK STATEMENT

Tetra Tech, Inc.

Contract # 68HERC20D0016

PR-OAR-21-01133

TO #TBD

### I. TITLE: Technical Support for International Methane Reductions

### II. TASK ORDER CONTRACTING OFFICER REPRESENTATIVE (TOCOR):

Task Order COR (TOCOR)	Alternate Task Order COR (ALTOCOR)
Name: Denise Mulholland Office: U.S. Environmental Protection Agency Office of Air and Radiation, Office of Atmospheric Programs Non-CO <sub>2</sub> Programs Branch, Climate Change Division 1200 Pennsylvania Avenue Mail Code: 6207A Washington, DC 20460  Cell Phone: (202) 297-0624  E-mail: <a href="mailto:mulholland.denise@epa.gov">mulholland.denise@epa.gov</a>	Name: Monica Shimamura Office: U.S. Environmental Protection Agency Office of Air and Radiation, Office of Atmospheric Programs Non-CO <sub>2</sub> Programs Branch, Climate Change Division 1200 Pennsylvania Avenue, NW Mail Code: 6207A Washington, DC 20460  Cell Phone: (202) 641-0589  E-mail: <a href="mailto:shimamura.monica@epa.gov">shimamura.monica@epa.gov</a>

**III. PERIOD OF PERFORMANCE:** Date of award through 12 months following Task Order award.

### IV. BACKGROUND INFORMATION:

EPA's Non-CO<sub>2</sub> Programs Branch (NCPB) in the Office of Air and Radiation supports activities, initiatives, and programs to foster reductions of methane emissions internationally, predominantly through the Global Methane Initiative (GMI). The GMI is an international public-private partnership, hosted by EPA via NCPB, whose mission is to reduce barriers to the recovery and use of methane as a clean energy source. The GMI is a collaborative effort among 45 partner countries, including developed countries, developing countries, and countries with economies in transition. Together these countries work with strong participation from the private sector through an international network of partner governments, private sector members, development banks, universities and non-governmental organizations to build capacity, develop strategies and markets, and remove barriers to project development for methane reductions in Partner Countries. By building international relationships, the GMI promotes opportunities to mitigate methane emissions and bring otherwise-wasted methane gas for use commercially or locally. GMI currently supports emission reductions across multiple sectors, including the Biogas (Wastewater, Municipal Solid Waste, Agriculture), Coal Mining and Oil & Gas sectors. GMI achieves its mission by providing technical support to deploy methane-to-energy projects around the world; serving as an information resource for Partner Countries, Project Network members, and other stakeholders; and

collaborating with other international organizations focused on methane recovery and use. GMI's actions have multiple benefits: reducing greenhouse gas emissions, improving the environment, enhancing economic growth, and promoting energy security. Detailed information on the GMI can be found at <https://www.globalmethane.org/> and [www.epa.gov/gmi](http://www.epa.gov/gmi).

## **V. OBJECTIVES**

The purpose of this task order (TO) is to provide technical, outreach and technology transfer support so that EPA can help international countries and sources quantify, track, evaluate, mitigate and/or recover methane emissions, particularly related to the oil and gas and wastewater sectors, under the Global Methane Initiative (GMI).

Most activities will require written Technical Direction (TD) from the EPA COR. The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities (except as otherwise specified) to perform the tasks for which they choose to respond to the RFP.

Contractor personnel shall not represent the views of the U.S. Government, EPA, or its employees. In addition, the Contractor shall not engage in inherently governmental activities, including but not limited to actual determination of EPA policy and preparation of documents on EPA letterhead.

**The period of performance for this task order is for twelve (12) months following the date of award.**

## **VI. SCOPE OF WORK**

Work to be performed under this Task Order aligns with the following task areas of the contract Performance Work Statement (PWS):

- 3.3 Technical Guidance, Report Development, and General Program Analysis
- 3.6 Environmental Assessments
- 3.9 Workshops, Conferences, Training, and Logistical Support
- 3.10 Expert/Peer Review Support
- 3.11 Public Outreach and Technology Transfer
- 3.13 Preparation of Presentation Materials

### **Task 1: Project Management**

The Contractor shall provide program management under this Task. During the Period of Performance (POP), the Contractor shall immediately inform the COR and CO by telephone and/or email of any issue(s) that may impede performance along with any corrective actions needed by the EPA or the Contractor to address the issue(s).

The Contractor shall attend a general Task Order kick-off meeting, via conference call, to discuss the goals, strategy, and schedule for completing the deliverables. During the overall Task Order kick-off call, the Contractor shall discuss the format of the Monthly Progress Report which will include a spreadsheet with the budget (tracked by Task) that details what has been spent under each Task and what is remaining. The Contractor shall propose a progress report template to the TOCOR for approval. The Contractor shall submit a Monthly Progress Report to EPA's Contracting Officer Representative (COR) and Contracting Officer (CO) using the approved template and to be discussed at the next bi-weekly call.

The Contractor shall schedule a recurring bi-weekly check-in conference call with TOCOR to discuss the week's priorities as well as any outstanding issues. Two days prior to the check in call, the Contractor shall provide a list of outstanding issues/deliverables each week.

The Contractor may subcontract or hire consultants if the Contractor does not have staff with the necessary skills or specialized experience is necessary to complete the project/deliverable. The Contractor will follow all EPA contracting rules and regulations when hiring subcontractors and consultants.

The Contractor shall also attend a one-two hour wrap-up call prior to the expiration of the task order.

Task 1 Deliverables	Schedule
Kick-off call	Scheduled within 7 days of receiving the Task Order award
Progress report template	Within 7 days of kick-off call
Progress report	Monthly
Check-in Calls	Recurring, Bi-weekly, one hour long
List of outstanding issues/deliverables	Recurring, two days before check-in calls
Wrap-up meeting	Per TOCOR collaboration

## **Task 2: Develop and Support Technical Reports, Tools and General Program Analysis**

EPA, under the auspices of GMI, develops technical analyses, tools, resources and other information to support methane abatement and mitigation actions across the coal mine, oil & gas, and biogas – including municipal solid waste, agriculture and municipal wastewater sectors by its Partners and Project Network Members around the world. Contractor assistance is required to develop technical reports and tools and to conduct general program analysis to address GMI audience needs and barriers.

Upon technical direction, the contractor shall assist EPA with developing and translating into other languages new and/or updated guidance, tools and materials that advance the quantification and tracking of methane emissions and the exploration of options to reduce methane, particularly in the oil and gas sectors but also in the wastewater sector as needed.

Support may include but is not limited to:

- Developing and/or updating web-based and software tools, guidance and trainings that help international governments:
  - Quantify, reduce, and/or track methane emissions, building off of EPA's internal draft *Methane Emission Factor Tool*;
  - Support decision-making and policy implementation, including, but not limited to, information on:
    - creating methane reduction goals,
    - identifying and communicating benefits,
    - assessing, prioritizing and designing strategies,

- financing mechanisms, and/or
  - monitoring, reporting and verification of emission reductions (MRV).
- Developing fact sheets, case studies, trainings, presentations and/or reports that:
    - identify international best practices in quantifying, tracking and/or mitigation methane emissions,
    - provide guidance on methods for quantifying, tracking and/or mitigating methane emissions,
    - discuss implementation and evaluation issues, and
    - provide information resources.

Upon receipt of technical direction, the Contractor shall set up a call with the TO COR to discuss the substance, outline, and timeline for the requested deliverables. The Contractor shall send for TOCOR approval a summary of the decisions made during the call, including the agreed upon process and timeline. Technical tools may require technical expert review before completion. During the call, the TO COR and Contractor shall discuss the process for the technical review of any product, as necessary.

Upon approval from the TOCOR and according to the schedule agreed upon during the task kick-off call, the Contractor shall develop, submit, and present via a video call a draft literature review to the TOCOR. The Contractor shall incorporate feedback from EPA and resubmit a final product.

Task 2 Deliverable	Schedule
2.1 Kick-off call to discuss approach, desired content, and timeline for tools, guidance and/or outreach products	Within seven days of overall Task Order kick-off call in Task 1
2.2 Summary of kick-off call and agreed upon timeline and approach for EPA confirmation	Within 3 days of Task 2 kick off call
2.3 Draft of Product (s), electronically and presented via a video call	Per agreed-upon schedule
2.4 Revised Final Product(s) reflecting EPA feedback	Within 2 week of EPA TOCOR comments

## **VII. ACCEPTANCE CRITERIA:**

The Contractor shall prepare high quality technical and written deliverables. The Deliverables shall be edited for grammar, spelling, and logic flow. The technical information shall be reasonably complete and presented in a logical, readable manner. Figures submitted shall be of high quality, similar to presentations developed for national scientific forums, and shall be formatted as jpeg or png files. Text deliverables shall be provided in Microsoft Word 2016 format. Spreadsheets shall be in Microsoft Excel 2016 format.

### ATTACHMENT 3 QUALITY ASSURANCE SURVEILLANCE PLAN

#### “Technical Support for Assessing, Managing, and Communicating the Ecological and Human Health Risks of Contaminants in Water, Fish, and Sediments, and of Microbial Pathogens in Surface Waters”

Purpose: The requirements performed under this contract are considered performance-based, focusing on the Agency’s desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency’s performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor’s performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the “Contractor Performance Evaluation” clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer’s Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b> The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer’s Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA’s consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor’s attention through the EPA CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.  Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations.
<b>Timeliness:</b> Services and deliverables shall be in accordance with schedules	During any period of performance, 90% of all submitted	100% of active task orders under the contract will be	<b>Unsatisfactory</b> rating under the category of Timeliness in the CPARS

stated in each task orders, unless amended or modified by an approved EPA action.	deliverables shall be submitted no later than one business day past the due date.	reviewed by the EPA TOCOR monthly (via Monthly Progress Report & milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	<p>when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Timeliness</b> if the contractor meets the measurable performance standards.</p>
<p><b>Cost Management and Control:</b></p> <p>The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.</p>	The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.	The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.</p>
<p><b>Technical Effort:</b></p> <p>The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work requiring the Contractor to provide options or recommendations shall</p>	All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the TOCOR in written	EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.	<p><b>Unsatisfactory</b> rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p> <p>A satisfactory rating will be reported in the CPARS</p>



include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	technical direction, and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.		Performance Evaluation System under the category of <b>Quality of Product or Service</b> if the contractor meets the measurable performance standards.
<p><b>Quality Assurance/Quality Control (QA/QC):</b> The Contractor shall comply with the quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (<a href="http://www.epa.gov/quality/qs-docs/r5-final.pdf">http://www.epa.gov/quality/qs-docs/r5-final.pdf</a>) and as required by the EPA TOCOR. The Contractor shall assign appropriately leveled and skilled technical and quality assurance personnel to develop a Quality Assurance Project Plan (QAPP) for all tasks requiring collection or use of environmental data.</p> <p>The QAPP shall be developed in consultation with the EPA TOCOR, and fully approved by the appropriate EPA personnel, before initiation of activities involving environmental data collection or use.</p> <p>Any change in the planned environmental data activities that become necessary during the course of the project shall be fully documented in approved revised versions of the QAPP prior to their implementation.</p>	<p>The Contractor shall notify the EPA TOCOR of any issues that impact project quality within 3 business days of occurrence.</p> <p>The Contractor shall notify the EPA TOCOR and COR within 5 business days of occurrence of any requests to collect or use environmental data without an EPA-approved QAPP.</p> <p>The Contractor shall document all QA/QC activities, including compliance with the quality objectives specified in the QAPP, in Monthly Progress Reports.</p>	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to assess contractor compliance with the approved QAPP, and to identify unreported issues related to project quality and requests to collect or use environmental data without an EPA-approved QAPP. The EPA TOCOR will report any issues to the EPA QAO and COR, who will bring the issue(s) to the Contractor's attention through the EPA CO for immediate resolution.	<p><b>Unsatisfactory</b> rating under the category of Quality Assurance/Quality Control in the CPARS if more than three incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality Assurance/Quality Control if the contractor meets the measurable performance standards.</p>

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES		
					12		
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00001		See Block 16C		PR-OAR-22-00295		68HERC20D0016	
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X)		9A. AMENDMENT OF SOLICITATION NO.	
TETRA TECH, INC.							
Attn: Andrew Parker						9B. DATED (SEE ITEM 11)	
10306 EATON PL STE 340							
FAIRFAX VA 220302201							
				X		10A. MODIFICATION OF CONTRACT/ORDER NO.	
						68HERC20D0016	
						68HERC21F0359	
						10B. DATED (SEE ITEM 13)	
						08/19/2021	
CODE		198549560		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
X B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 198549560							
TOCOR: Sarah Menassian Invoice Approver: Sarah Menassian Alt Invoice App: MSHIMAMURA							
The purpose of modification P00001 is to:							
1. Change the Task Order Contracting Officer's Representative (TOCOR) from Denise Mulholland to Sarah Menassian.							
2. Ms. Menassian's contact information is:							
Sarah Menassian							
Ph: 202-343-9165							
Email: menassian.sarah@epa.gov							
3. Change the contracting officer and buyer to Kimberly Loesch							
4. Ms. Loesch's contact information is:							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Kimberly F. Loesch			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				ELECTRONIC SIGNATURE		01/14/2022	
				(Signature of Contracting Officer)			

NAME OF OFFEROR OR CONTRACTOR  
TETRA TECH, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Kimberly Loesch Ph: 513-487-2058 Email: loesch.kimberly@epa.gov 5. All other terms and conditions remain unchanged.  Period of Performance: 08/19/2021 to 08/18/2022				